

File NR S2-30643
WR Doc ID 6271328

State of Washington
REPORT OF EXAMINATION
FOR WATER RIGHT APPLICATION

PRIORITY DATE
7/24/2014

WATER RIGHT NUMBER
S2-30643

MAILING ADDRESS
RODNEY ROEDER
701 COOK UNDERWOOD RD
COOK WA 98605

SITE ADDRESS (IF DIFFERENT)

Quantity Authorized for Withdrawal or Diversion

WITHDRAWAL OR DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)
0.11	CFS	6.0

Purpose

PURPOSE	WITHDRAWAL OR DIVERSION RATE			ANNUAL QUANTITY (AF/YR)		PERIOD OF USE (mm/dd)
	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	
Irrigation	0.11	0.0	CFS	5.5	0.0	04/01 - 10/31
Stock water	0.0	0.11	CFS	0.1	0.0	01/01 - 12/31
Domestic single	0.0	0.11	CFS	0.4	0.0	01/01 - 12/31
Emergency fire protection	0.0	0.11	CFS	0.0	0.0	01/01 - 12/31

ADDITIVE	IRRIGATED ACRES		PUBLIC WATER SYSTEM INFORMATION	
	NON-ADDITIVE		WATER SYSTEM ID	CONNECTIONS
2	0		(FW415M)	11

Remarks: The quantities of water approved under this water right are for a new appropriation from the listed source and have not been appropriated under any existing water right certificates or permits held by the United States Fish and Wildlife Service (USFWS).

Source Location

COUNTY	WATERBODY	TRIBUTARY TO			WATER RESOURCE INVENTORY AREA		
SKAMANIA	UNNAMED SPRING	LITTLE WHITE SALMON RIVER			29-WIND-WHITE SALMON		
SOURCE FACILITY/DEVICE	PARCEL	TWP	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
UNNAMED SPRING	03092600020000	03N	09E	26	NWNW	45.714167	-121.645
Datum: NAD83/WGS84							

Remarks: This water right shares a point of diversion with the USFWS Water Right Application S2-30648. This water also holds complete priority over water right S2-30648 per Stipulation and Agreed Order of Dismissal PCHB No. 14-003.

Place of Use (See Attached Map)**PARCELS**

03092600030100

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

A tract of land located in Government Lots 4 & 5, in Section 26, Township 3 North, Range 9 E.W.M., Skamania County, Washington, described as follows. Lot 1 of the John Jessup Short Plat recorded September 13th, 1985 in Book 3 of Short Plats on Page 84, Skamania County Records.

Proposed Works

Mr. Roeder proposes to abandon the existing 1" water line servicing the Roeder and Quezada residences and install a 2.5" water line. This includes the portion of pipeline starting at the 3" gate valve owned by USFWS down to the water main connection at Mr. Roeder's residence. This section of pipeline only serves the Roeder and Quezada residences and does not provide water to any USFWS hatchery buildings or associated parcels.

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
January 1, 2017	January 1, 2020	January 1, 2022

Measurement of Water Use

How often must water use be measured?	Monthly
How often must water use data be reported to Ecology?	Upon Request by Ecology
What volume should be reported?	Total Annual Volume
What rate should be reported?	None Peak Rate of Withdrawal (gpm or cfs)

Provisions**Measurements, Monitoring, Metering, and Reporting**

An approved measuring device shall be installed and maintained on the applicant's property identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use," WAC 173-173.

WAC 173-173 describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

Water Use Efficiency

The water right holder is required to maintain efficient water delivery systems and use of up-to-date water conservation practices consistent with RCW 90.03.005.

This water right and Water Right S2-30648 share a common point of diversion and distribution system. The Department of Ecology cannot guarantee the availability or delivery of quantities authorized under this right due to existing water system maintenance and delivery agreements between the water right holder and the USFWS. Resolution of issues involving the infrastructure or delivery of water is a private matter and is the responsibility of the parties sharing this system.

Proof of Appropriation

The water right holder shall file the notice of Proof of Appropriation of water (under which the certificate of water right is issued) when the permanent distribution system has been constructed and the quantity of water required by the project has been put to full beneficial use. The certificate will reflect the extent of the project perfected within the limitations of the permit. Elements of a proof inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions.

Schedule and Inspections

Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

Findings of Facts

Upon reviewing the investigator's report, I find all facts, relevant and material to the subject application, have been thoroughly investigated. Furthermore, I concur with the investigator that water is available from the source in question; that there will be no impairment of existing rights; that the purpose(s) of use are beneficial; and that there will be no detriment to the public interest.

Therefore, I ORDER approval of Application No.S2-30643, subject to existing rights and the provisions specified above.

Your Right To Appeal

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

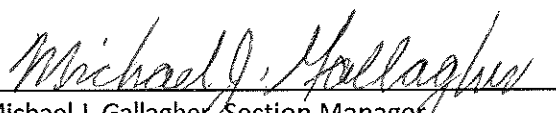
To appeal you must do the following within 30 days of the date of receipt of the Order.

File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.

- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.
- You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel RD SW Ste 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

Signed at Olympia, Washington, this 27th day of February 2015.


Michael J. Gallagher, Section Manager

For additional information visit the Environmental Hearings Office Website: <http://www.eho.wa.gov>. To find laws and agency rules visit the Washington State Legislature Website: <http://www1.leg.wa.gov/CodeReviser>.

INVESTIGATOR'S REPORT

Application for Water Right -- Roeder

Water Right Control Number S2-30643

Matthew K. Rakow, Department of Ecology

BACKGROUND

This report serves as the written findings of fact concerning Water Right Application Number S2-30643.

On July 24, 2014, Rodney and Mary Roeder submitted a new water right application for the appropriation of an unnamed spring currently in use for the domestic water source of the United States Fish and Wildlife Service's (USFWS) Little White Salmon Fish Hatchery. The USFWS constructed the domestic water system and diversion after purchasing property from the Jessup family in the 1950's and 1970's. The Jessup's included provisions in the property deeds for land sold to the USFWS which guaranteed water service to land still owned at that time by the Jessup family. The Roeder's are non-paying customers on the domestic water system ever since they purchased the property in 1986 from the Jessup family. In 2013, Mr. Roeder appealed Ecology's decision to approve a water right (S2-30600) for the USFWS's domestic water system at the Little White Salmon Hatchery. Mr. Roeder argued that the USFWS withheld his property from the place of use for Water Right Application S2-30600, excluding the USFWS from legally providing water to Mr. Roeder's residence and violating the terms of the deeds on his property stating that the USFWS must maintain access to the domestic water system. All parties entered into a settlement agreement and Mr. Roeder was granted permission to apply for a new and separate water right under Stipulation and Agreed Order of Dismissal, PCHB No. 14-003. The USFWS also subordinated all water granted under S2-30600¹ to Mr. Roeder. Application S2-30643 requests a combined instantaneous rate of 0.1 cubic feet per second (cfs) for domestic supply, irrigation, stock water, and fire prevention and protection (Table 1).

Table 1. Details of New Water Right Application S2-30643

Control Number	S2-30643			
Name	Rodney and Mary Roeder			
Priority Date	7/24/2014			
WIRA	29 - Wind-White Salmon			
Source	Unnamed Spring			
Tributary To	Little White Salmon River			
Purpose of Use	Domestic Supply	Irrigation (2 acres)	Stock water	Fire Prevention & Protection
Instantaneous Rate	0.01 cfs	0.08 cfs	0.02 cfs	0.11 cfs (non-additive) ²
Annual Quantity	N/A	N/A	N/A	Unspecified
Period of Use	Year Round	Year Round	Year Round	Year Round
Place of Use	A tract of land located in Government Lots 4 & 5, in Section 26, Township 3 North, Range 9 E.W.M., Skamania County, Washington, described as follows. Lot 1 of the John Jessup Short Plat recorded September 13 th , 1985 in Book 3 of Short Plats on Page 84, Skamania County Records.			

CFS = Cubic Feet per Second; Ac-ft/yr = Acre-feet per year; WRIA = Water Resource Inventory Area
E.W.M. = East of the Willamette Meridian; Datum: NAD83/WGS84.

¹Upon review of the USFWS's Report of Examination and proposed permit structure for Water Right S2-30600 subsequent to Mr. Roeder's appeal to the Pollution Control Hearings Board, Ecology has found that significant revisions were needed to before a permit could be issued. The resulting solution was remove the domestic water system portion of Water Right S2-30600 and have USFWS apply for new Water Right S2-30648 requesting to appropriate water using the domestic water system.

²The 0.11 cfs requested for fire prevention and protection is for alternate use and is non-additive to the combined instantaneous diversion for all other uses.

Table 2 provides location details for the existing point of withdrawal for the USFWS's domestic water system.

Table 2. Point of Withdrawal Location Information

Source Name	Parcel	Twp	Rng	Sec	QQ Q	Latitude	Longitude
Unnamed Spring	03092600020000	03N	09E	26	NW NW	45.724167	-121.645000

Sec. = Section; QQ Q = Quarter-quarter of a section

Legal Requirements for Approval of Appropriation of Water

Public Notice

RCW 90.03.280 requires that notice of a water right application be published once a week, for two consecutive weeks, in a newspaper of general circulation in the county or counties where the water is to be stored, diverted and used. Notice of this application was published in the *Skamania County Pioneer* on the 3rd and 10th of September 2014.

Consultation with the Department of Fish and Wildlife

The Department must give notice to the Department of Fish and Wildlife (DFW) of applications to divert, withdraw or store water. This water right shares the same source and point of diversion as Water Right Application S2-30600 submitted by the United State Fish and Wildlife Service in 2012. Philip Crane (Ecology) contacted Steve Boessow (WDFW) on June 28, 2012 in regards to Water Right Application S2-30600. Mr. Boessow did not object to the appropriation of water from the spring source. His justification is that the stream fed by the spring is not fish bearing.

State Environmental Policy Act (SEPA)

A water right application is subject to a SEPA threshold determination (i.e., an evaluation whether there are likely to be significant adverse environmental impacts) if any one of the following conditions are met.

- (a) It is a surface water right application for more than 1 cubic foot per second, unless that project is for agricultural irrigation, in which case the threshold is increased to 50 cubic feet per second, so long as that irrigation project will not receive public subsidies;
- (b) It is a groundwater right application for more than 2,250 gallons per minute;
- (c) It is an application that, in combination with other water right applications for the same project, collectively exceed the amounts above;
- (d) It is a part of a larger proposal that is subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA);

- (e) It is part of a series of exempt actions that, together, trigger the need to do a threshold determination, as defined under WAC 197-11-305.

Because this application does not meet any of these conditions, it is categorically exempt from SEPA and a threshold determination is not required.

INVESTIGATION

The material reviewed in support of this application included the following:

- The State Surface Water Codes, administrative rules, and policies
- Department of Ecology's Water Right Tracking System (WRTS) database
- Topographic, geologic, and local area maps
- Ecology file and consultant notes for Water Right S2-30600
- Notes from site visit conducted on September 25, 2014
- Conversations with Mr. Roeder
- WRIA 29 Watershed Plan
- The Washington State Irrigation Guide

Project Area Description

The project area is located within Skamania County along the southern boundary of the Wind-White Salmon Water Resource Inventory Area 29. The applicant's property sits at an elevation of 313 above mean sea level overlooking Drano Lake and the Columbia River.

The spring source lies at an elevation of 650 feet above mean sea level and approximately 3,200 feet to the north by northeast of the applicant's property on a hillside above Cook-Underwood Road. Water from the spring naturally flows south down the hillside into a southeast trending drainage and then into the Little White Salmon River approximately 2,000 feet north from the mouth of the Little White Salmon River.

Local Area Geology

The project area is situated on Grand Ronde Basalt flows that make up the bluffs along the Columbia River. Seeps and springs are common in the area as water flows through fracture networks in the basalt (Korosec, 1987).

Water System Description

The Roeder's residence is connected to a water system owned and operated by the USFWS (Department of Health Water System ID FW415M). A pipeline diverts water from the main USFWS distribution system to deliver water to the Roeder and Quezada residences. The Quezada residence is located two parcels to the north of the Roeder residence.

The USFWS water system consists of the following components:

- Spring catchment system
- Six inch potable water pipeline from catchment to the storage and chlorination station
- Six inch non-potable irrigation water pipeline to USFWS employee housing irrigation system that tees off the main potable water line before the storage and chlorination system
- 30,000 gallon concrete storage tank, chlorination system, and water meter

- Four inch potable water pipelines to hatchery buildings and USFWS employee housing units
- Three inch gate valve that regulates delivery of water to Roeder and Quezada residences
- One inch pipeline from three inch gate valve that delivers water to the Roeder and Quezada residences

The Roeder residence is the last residence served on the domestic system and only one pipeline is utilized for all of the Roeder's proposed uses.

Mr. Roeder plans to abandon the aging one-inch pipeline serving the Quezada's and his residence and install a larger diameter pipe. The larger diameter pipe will provide more flow to the Roeder residence allowing Mr. Roeder to install a dedicated high flow water spigot for emergency fire fighting. Installation of the pipeline requires county permits and authorization from the USFWS that have not been obtained at the time of writing this report.

Proposed Use and Basis of Water Demand

Mr. Roeder proposes to use water for single domestic, irrigation, stock watering, and fire protection and prevention.

Table 3 outlines the calculated annual demand quantities for each proposed use of water.

Table 3. Calculated Annual Water Use Demand Estimates

Purpose	Annual Quantity (ac-ft/yr)
Single Domestic	0.4
Irrigation of 2 acres	5.5
Stock watering	0.1
Emergency Fire Fighting (Fire Protection)	N/A
Total	5.97

Single domestic supply

The domestic water use allotment was estimated using the Department of Health's maximum daily residential demand for in-house use of 350 gallons per day for a single residence (Washington 2009). This daily quantity equates to 0.4 acre-feet per year.

Irrigation Requirement

The Washington Irrigation Guide was used for estimating the water duty for the roughly two acres of pasture located on Mr. Roeder's property. Precipitation and evapotranspiration (ET) data were obtained through the Washington State University's AgWeatherNet website. The University operates a weather station in the Underwood area located approximately 4.7 miles to the east by northeast of Mr. Roeder's

property. Equations (1) and (2) were used to calculate the net irrigation requirement for pasture:

$$F_n = ET_c - P_e - GW - \Delta SW \quad (1)$$

where:

- F_n = net irrigation required for season (in)
- ET_c = crop ET for season (in)
- P_e = average monthly effective precipitation (in)
- GW = groundwater contribution (in)
- ΔSW = soil water depleted during season (in)

$$P_e = SF(0.70917P_t^{0.82416} - 0.11556)(10^{0.02426ET_c}) \quad (2)$$

where:

- P_e = average monthly effective precipitation (in)
- SF = soil water storage factor (in)
- P_t = monthly mean precipitation (in)
- ET_c = average monthly crop evapotranspiration (in)

Equation (3) then calculates the gross irrigation requirement by factoring in application efficiency:

$$F_g = ((F_n \div 12) \times A)(E_A \div 100) \quad (3)$$

where:

- F_g = gross irrigation required for season (acre-feet)
- F_n = net irrigation required for season (in)
- A = number irrigated acres (acre)
- E_A = irrigation application efficiency (percentage)

Equation (1) calculates a net irrigation requirement of 4.10 acre-feet. Using Equation (3) for the irrigation of 2 acres and an application efficiency of 75%, a gross irrigation requirement of roughly 5.5 acre-feet per season is estimated to be sufficient (United States, 1991 and 1997).

Stock Water Requirements

Mr. Roeder requires water for stock watering four sheep, twelve chickens, four pigs, and two heads of steer to be purchased in the near future. An annual quantity of 0.1 ac-ft/yr was calculated using a water requirements table published by the Montana Department of Natural Resources and Conservation (Montana, 2012).

Fire Protection

Emergency fire fighting will be included because Mr. Roeder plans to install a dedicated water spigot for fire fighting. Emergency fire fighting will not have an annual quantity assigned to it.

Fire Prevention

Mr. Roeder currently employs four irrigation sprinklers attached to steel fence posts to wet down vegetation to the west of his property located on United States Forest Service land.

I spoke with Aaron Schmidt from the Washington Department of Natural Resources on October 28, 2014. Aaron is the Pacific-Cascade Region Fire Operations District Manager and has over 24 years experience in fire fighting. His professional opinion is that the Mr. Roeder's current practice of watering down vegetation is not creating a positive effect and is not a practice he has used in his years of fire fighting. Aaron and I also concur that Mr. Roeder is in fact encouraging the growth of the vegetation he is in fact concerned with being a fire risk. Aaron's conclusion is that using irrigation sprinklers to water down vegetation is not a recognized fire mitigation strategy and he recommends practicing fuels reduction as the best method of fire mitigation. Therefore, water currently used for fire prevention is not considered a beneficial use of water and will not be approved under this water right.

Other Rights Appurtenant to the Place of Use

There are no other water rights appurtenant to the place of use under the Roeder's water right application.

Impairment Considerations

Impairment is an adverse impact on the physical availability of water for a beneficial use that is entitled to protection. A search of the Department's Water Rights Tracking System (WRTS) for surface water right records along the drainage fed by the source spring only returned applications from the USFWS and Mr. Roeder. There are no other downstream water right holders from the point of discharge to where the water enters the Columbia River less than a mile away.

This water right is senior to water rights S2-30600 and S2-30648 held by the USFWS pursuant to Stipulation and Agreed Order of Dismissal, PCHB No. 14-003. Water Right S2-30648 shares a point of diversion with this water right and S2-30600 diverts water that is partially supplied by runoff from the spring used by this water right. There does not appear to be any risk of impairment since this water system has been operating in its current state for almost 30 years.

Water Availability

For water to be available for appropriation, it must be both physically and legally available.

Physical Availability

The unnamed spring source has been flowing uninterrupted for at least six decades without any report of supply issues.

Legal Availability

There are no Surface Water Source Limitations, instream flow rules, or any other administrative closures on the spring source. There are no recommendations within the Western WRIA 29 watershed plan that makes water from this source legally unavailable for appropriation.

This water right and Water Right S2-30648 share a common point of diversion and distribution system. The Department of Ecology cannot guarantee the availability or delivery of quantities authorized under this right Due to existing water system maintenance and delivery agreements between the water right holder and the holder of Water Right S2-30648. Resolution of issues involving the infrastructure or delivery of water is a private matter and is the responsibility of the parties sharing this system.

Beneficial Use

The proposed uses of water for single domestic, irrigations, stock watering, and emergency fire fighting are defined in statute as beneficial uses (RCW 90.54.020(1)).

The proposed use of fire prevention is not considered a beneficial use because wetting down vegetation is not a recognized fire mitigation strategy.

Public Interest Considerations

The western WRIA 29 Watershed Planning Unit approved a final watershed plan on December 14, 2005. The plan recommendations do not limit diversions from the requested spring source or preclude the approval of new appropriations of water.

The overflow from the spring diversion flows down a very steep, rocky slope that is not a fish-bearing habitat. In addition, this appropriation, as recommended, will not adversely affect environmental or recreational values and will not be detrimental to the public interest.

Consideration of Protests and Comments

Several comments were filed during the Draft ROE Public Comment period. Mr. Rod Roeder presented several issues and they are as follows:

- i. Is Mr. Roeder required to seek approval from the Department of Health to upgrade the Roeder/Quezada distribution line?
- ii. Mr. Roeder questions Ecology's assertion that he needs to seek authorization from the USFWS to upgrade the Roeder/Quezada distribution line.
- iii. Mr. Roeder argues that his practice of using irrigation sprinklers to water down vegetation as a method of fire prevention is sound and should be allowed by Ecology.
- iv. Mr. Roeder argues that his practice of using irrigation sprinklers to water down vegetation as a method of fire prevention is a beneficial use and should be allowed by Ecology.

Ecology has the following response to Mr. Roeder's comments:

- i. Ecology consulted with Susan Clark from the Department of Health about the regulation of the Roeder/Quezada distribution line. Susan stated that the Department of Health does not regulate that portion of the water system and Mr. Roeder does not need to seek approval from the Department of Health to upgrade his water line.
- ii. Ecology is asserting that the USFWS owns the vault that houses the 3 inch gate valve where the Roeder/Quezada line connects to the USFWS system and Mr. Roeder must have permission to physically access USFWS property. Mr. Roeder does not need to obtain permission from the USFWS to upgrade his water line.
- iii. Mr. Roeder submitted a water right application with a specified place of use listed as his personal property and that he owned all of the land to which water would be used on. Application of water across his property boundary on land owned by the United States Forest Service cannot be authorized under this application and would require permission from the Forest Service.

Furthermore, Ecology would not approve the proposed application of water because DNR's Pacific-Cascade Region Fire Operations District Manager indicates that there are other more

effective ways to prevent fires. We conclude that the water requested for this purpose is not a beneficial use and that this water should remain in-stream to maintain the quality of the natural environment.

iv. See response for item iii.

Conclusions

I find that:

- Water is available from the unnamed spring in the quantities requested.
- Domestic, stock water, irrigation, and emergency fire fighting uses are beneficial uses.
- The appropriation, as recommended, will not impair existing rights.
- Approval of this application will not be detrimental to the public welfare.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that this request for a water right be approved in the amounts and within the limitations listed below and subject to the provisions listed above.

Purpose of Use and Authorized Quantities

The amount of water recommended is a maximum limit and the water user may only use that amount of water within the specified limit that is reasonable and beneficial:

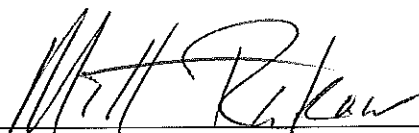
- 0.11 cfs
- 6.0 acre-feet per year
- Single Domestic, Irrigation, Stock Watering, and Emergency Fire Protection

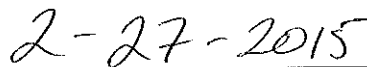
Point of Diversion

NW ¼, NW ¼, Section 26, Township 3 North, Range 9 E W.W.M.

Place of Use

A tract of land located in Government Lots 4 & 5, in Section 26, Township 3 North, Range 9 E.W.M., Skamania County, Washington, described as follows. Lot 1 of the John Jessup Short Plat recorded September 13th, 1985 in Book 3 of Short Plats on Page 84, Skamania County Records.


Matthew K. Rakow


Date

If you need this publication in an alternate format, please call Water Resources Program at (360) 407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Selected References

Korosec, M.A. *Geologic Map of the Hood River Quadrangle, Washington and Oregon: Washington Division of Geology and Earth Resources, N4530-W12100*. 1 sheet. Scale 1:250,000. 1987. Electronic.

Montana Department of Natural Resources and Conservation. *Form 615 – Water Conversion Table*. p. 2. 2012. Electronic.

Skamania County. *TerraScan MapSifter*. <<http://skamaniawa.mapsifter.com>>. November 5, 2014.

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United States Department of Agriculture. Soil Conservation Service. *National Engineering Handbook, Part 623, Section 15, Chapter 2 - Irrigation*. 1991. Electronic.

Washington State Department of Ecology. *Washington State Water Right Tracking System*. November 5, 2014.

Washington State Department of Health. *Water System Design Manual*. December 2009.

